

REMARKS

The application was filed with 24 claims, all of which have been canceled in this amendment. New claims 25-43 have been added and are now pending for examination. Reexamination and reconsideration of the application, as amended, are respectfully requested.

New claim 25 includes a limitation requiring that both "at least one biting blade adapted to pull pieces of the bone to be crushed into the space between the first and second cutter units" and "at least one crushing blade adapted to crush said bone pieces" be present on the same cutter disk.

This limitation describes a configuration that is particularly advantageous for a bone mill of this type. As described in the specification, the biting blades draw bone into to the spaces between the blades, where the bone is crushed by the crushing blades. This configuration is particularly suited to crush bone whose surface is hard and slick. In conventional bone mills that lack this feature, bone pieces can tend to slip and ride over the crushing blades, never being drawn fully into the mill for effective crushing.

Support for this limitation is found in the specification at page 14, and in Figs. 8A and 10A, which depict cutter disks that satisfy this limitation. None of the references cited against the application in the first office action teaches or suggests this limitation. Applicant submits, therefore, that this limitation renders new claim 25 patentably distinct over the prior art, and prompt allowance of that claim is respectfully requested.



New claims 26 – 32 are all dependent in some manner from new claim 25, and should thus all be patentable in light of the patentability of claim 25. Applicant accordingly requests the prompt allowance of new claims 26-32 as well.

New claim 33 includes a limitation requiring at least one disk having both a blade “arranged to draw a relatively larger rotational locus” and a blade “arranged to draw a relatively smaller rotational locus” on a single disk of at least one of the cutter units. Support for this limitation is found in the specification at page 14, and in Figs. 8A and 10A, which depict cutter disks that satisfy this limitation.

This limitation describes an advantageous configuration for a bone mill of this type. This configuration provides a mix of large and small blades. The large blades draw the bone pieces into the bone mill to be crushed, while the provision of small blades allows for a configuration that avoids the possibility of forces on the disks from becoming too large, which might be the case if the disks were provided only with the relatively larger size blades.

None of the references cited against the application in the first office action teaches or suggests this limitation. Applicant submits that this limitation renders new claim 33 patentably distinct over the prior art, and prompt allowance of that claim is therefore respectfully requested.

New claims 34 – 40 are all dependent in some manner from new claim 33. Those claims should thus all be patentable in light of the patentability of claim 33. Applicant therefore requests the prompt allowance of new claims 34 – 40.

New claim 41 requires the first and second cutter units of the bone mill be arranged inside a case "provided at a lower portion thereof with a placing face on which there is slidably placed a container arranged to receive bone particles which fall down after a bone has been crushed while passing between said first and second cutter units." Support for this limitation is found in the specification at page 21 and in Fig. 15.

A similar limitation was present in original claim 16, which the Examiner rejected under section 103 as being unpatentable over *Becker* in view of *Grooms*. The Examiner alleged in connection with this limitation that "The exact design of the receiver and [its] support would then have been an obvious design choice to one skilled in the art as it solves no stated problem." *Office Action*, ¶ 7. Applicant respectfully disagrees.

Preliminarily, the patent statute does not require any *single element*, taken alone, of a claimed invention to solve any particular problem. Patentability requires only that the invention *as a whole* be useful, new, and nonobvious. 35 U.S.C. §§101-103. The claimed bone mill is a useful device. Moreover, the limitation in question by itself describes a useful feature of the claimed device. As described at page 22 of the specification, the claimed structure is simple and therefore amenable to reliable and convenient sterilization.

Moreover, the Examiner has not cited any prior art reference that discloses the specific configuration claimed in new claim 41. Such a reference may well exist. If so, Applicant requests that the Examiner cite it so that it can be judged to see

whether it is properly combinable with art disclosing the other elements of new claim 41, and whether the resulting combination would render the entire claimed invention obvious to one of ordinary skill. If no such reference exists or if nothing in the reference would suggest its combination with other art to make the claimed combination, then new claim 41 is patentably distinct over the prior art and the prompt allowance of this claim is respectfully requested.

New claim 42 depends from new claim 41, and should thus be patentable for the same reasons as those discussed above with respect to claim 41. New claim 42 includes an additional limitation requiring "a main container and a receiving member configured to receive said main container." This configuration and its usefulness in avoiding waste are described at page 21 of the specification. This limitation is not suggested by any reference cited by the Examiner, and is a further ground for patentability in addition to that discussed above in connection with claim 41.

New claim 43 depends from claims 41 and 42, and additionally requires a "placing face" that "slopes upward in a direction in which the container is configured to be pulled outward away from the bone mill." This limitation is supported at page 22 of the specification, where its usefulness is described as a simple structure that avoids the negative effects of vibration, *i.e.*, the slope keeps the container from creeping out of its holder without any complicated and difficult to sterilize latching mechanism. This limitation, like the limitations discussed above in connection with claims 41 and 42, is not taught by any reference the

Examiner has cited, and provides a further reason why new claim 43 is patentably distinct over the prior art.


In view of the foregoing, it is respectfully submitted that the application is now in condition for allowance. Reexamination and reconsideration of the application, as amended, are hereby requested. If for any reason the Examiner believes that speaking with the applicant's attorney would help to advance the prosecution of this examination, the Examiner is cordially invited to call the undersigned attorney in his Los Angeles office at (213) 337-6700.

You are hereby authorized to charge any fees due and refund any surplus fees to our Deposit Account No. 50-1314.

Respectfully submitted,

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